

**EXHIBIT G  
PART 4 OF 6**

**REDACTED VERSION OF  
DOCUMENT SOUGHT TO BE  
SEALED**



enterprises to provide mobile email to employees will slow in the global recession. This will especially be the case in North America and the credit crisis has decimated traditional RIM customers such as banks and law firms.”<sup>365</sup> Analysts also expected “RIM to face increasing competition as it struggles in an increasingly competitive [enterprise] sector. As a result of Apple and Android device popularity, we anticipate reduced demand from RIM’s traditional stronghold, enterprise users.”<sup>366</sup>

263. BlackBerry launched its app store, BlackBerry App World in 2009, almost a full year after Google and Apple had launched their respective app stores. Moreover, their traditional user base of “large corporate customers didn’t want personal applications on corporate phones,” which would have depressed demand for apps on the BlackBerry platform rather than any shortcoming of Java.<sup>367</sup>
264. Therefore, Dr. Leonard’s analysis of the “BlackBerry experience” is flawed because it fails to consider the contextual factors that contributed to BlackBerry becoming sidelined as a platform. Dr. Leonard’s analysis is further flawed because he fails to consider that BlackBerry actually had been a successful Java-based platform in the late 1990s to mid-2000s, before Android entered the market. In September 2008, BlackBerry had 50% of the smartphone market in the US and at its peak during the 2007-2015 time period, it had about 12% of the overall mobile phone market in the US.<sup>368</sup> All BlackBerry phones from BlackBerry OS 7 and earlier were Java-based.<sup>369</sup> Finally, although the BlackBerry OS was Java-based and proprietary, developers did not seem to find Java or the closed nature of the platform a deterrent: “The BlackBerry OS platform was limited to Java and HTML5. While not actually more difficult to develop for, creating a genuinely good app experience on a BlackBerry OS app was much harder.”<sup>370</sup> In actuality, other features of the BlackBerry OS platform, such as cumbersome development tools and an unestablished app store, deterred developers from building for the platform.<sup>371</sup>
265. For all of the reasons above, it is improper for Dr. Leonard to conclude that Java as a platform choice played a role in BlackBerry’s lack of success.

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<sup>365</sup> February 2009 Macquarie Capital Equity Research Report.

<sup>366</sup> June 20, 2011 Equity Research Report on RIM, Macquarie.

<sup>367</sup> <http://www.theglobeandmail.com/report-on-business/the-inside-story-of-why-blackberry-is-failing/article14563602/?page=all>.

<sup>368</sup> <http://www.foxnews.com/story/2008/09/09/blackberry-maker-snags-half-us-smartphone-market.html>; Expert Report of Dr. Leonard, February 8 2011, Exhibit 5a.

<sup>369</sup> <http://www.zdnet.com/pictures/a-history-of-blackberry-in-nine-iconic-handsets-and-one-meh-tablet-photos/2/>; <http://www.blackberry.com/news/connection/200201.shtml>; <http://www.javaworld.com/article/2073501/blackberry-going-with-qnx--java-me-to-lose-its-highest-profile-os-.html>

<sup>370</sup> <http://n4bb.com/memory-leaks-dark-blackberry-7/>; <https://www.quora.com/Is-developing-apps-for-BlackBerry-OS-more-challenging-than-developing-apps-for-iOS-and-Android#>.

<sup>371</sup> <https://spin.atomicobject.com/2010/11/22/the-cost-of-building-blackberry-apps/>; <http://www.digitaltrends.com/mobile/blackberrys-app-world-can-it-ever-catch-up-to-apple-android/>.



### 6.2.9 Dr. Leonard's View Regarding the OpenJDK

- 266. Dr. Leonard states that “[t]he fact Sun chose to open-source its Java SE reference implementation including the allegedly copyrighted material, demonstrates that the contribution of the allegedly infringing material to the value (profit) of a platform like Android was not particularly large.”<sup>372</sup>
- 267. I understand that Gwyn Murray has concluded that “Google’s incorporation of OpenJDK-based code in the master branch of Android poses a significant risk that additional elements of the Android stack (including modifications made by OEMs) would be subject to the requirements of GPLv2CE.”<sup>373</sup> I also understand that Dr. Kemerer found that “OpenJDK is not pertinent to the impact of Google’s use on the market for Java, because Google would never have accepted the license for OpenJDK” and because OEM’s would not have accepted GPLv2CE either.<sup>374</sup> Finally, I note the record evidence shows that Google did not in fact accept the license for OpenJDK.<sup>375</sup>
- 268. Dr. Leonard appears to incorrectly assume that the 37 Java APIs in OpenJDK would function in Android in the same way as the 37 Java APIs from Java SE. However, I understand that, had Google opted to use OpenJDK at the time Android was first announced, it would have been a high business risk for Google that OEMs would have rejected Android and not a risk they were willing to take. Indeed, Google intentionally did not opt for OpenJDK before releasing Android.<sup>376</sup>

## 7. RESPONSIVE OPINIONS REGARDING APPORTIONMENT

### 7.1 Apportionment Framework for Infringer's Profits

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- 269. I understand that, when apportioning profits, an expert should not consider the infringing work’s quantitative share of the total, but rather its relative value to the overall work.<sup>377</sup> I also understand an expert should consider the relative quality of the various components of an overall work, and where the infringing portion gives the infringing firm a unique claim or the ability to market something it otherwise couldn’t, the qualitative contribution of the infringed work – and not merely its simple pro rata share of the total work – should guide the apportionment analysis.<sup>378</sup>

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<sup>372</sup> Expert Report of Dr. Leonard, February 8, 2016, p. 72.

<sup>373</sup> Murray report, ¶ 164.

<sup>374</sup> Expert Report of Dr. Kemerer, February 8, 2016, ¶¶ 25 and 258.

<sup>375</sup> Trial Exhibit 154; Trial Exhibit 230.

<sup>376</sup> Trial Exhibit 154; Trial Exhibit 230.

<sup>377</sup> Litigation Services Handbook, The Role of the Financial Expert (Third Edition), Roman L. Weil, Michael J. Wagner, Peter B. Frank (2001) Chapter 22. p. 7.

<sup>378</sup> Litigation Services Handbook, The Role of the Financial Expert (Third Edition), Roman L. Weil, Michael J. Wagner, Peter B. Frank (2001) Chapter 22. p. 7.



270. As such, an apportionment based on the pro-rata share a copyright holds of an overall work (e.g. lines of code as a percentage of total lines of code) ignores the relative value of the copyright. In this current matter, although the Infringed Java Copyrights may represent a small portion of the entire Android source code, as discussed previously in this report and throughout my Initial Report, the Infringed Java Copyrights provided Google with very significant and valuable benefits including, but not necessarily limited to: 1) credibility with key launch business partners—carriers and OEMs; 2) faster time to market; 3) access to a large Java developer network; 4) stability and reliability.<sup>379</sup> In addition, as discussed in my Initial Report and herein, the technical centrality analysis performed by Dr. Kemerer demonstrates that the lines of code associated with the Java APIs are more significant than the other Android API lines of code. This centrality analysis alone shows that a lines of code comparison is an inappropriate measure of value.

271. As discussed in Section 4.5 and Section 4.6, I believe Dr. Leonard's approaches to apportioning Google's causally connected profits are fundamentally flawed, and therefore unreliable. Thus, I have prepared an alternative apportionment analysis that is set forth in the following section.

## **7.2 Profits Apportioned to the Android Platform and Therefore to the Java APIs**

### **7.2.1 Commingling Theory and Legal Basis for Claiming 100% of Platform Contribution**

272. As discussed previously, my apportionment analysis is consistent with the application of the legal theory of commingling and is therefore based on 100% of the value of the Platform Contribution. I find application of that legal theory would be appropriate in this case because Google knowingly assumed the risk of its failure to obtain a license and created the scenario whereby the relative contributions of the Java APIs to the total Platform Contribution are extremely difficult, if not impossible, to discern with reasonable certainty. My opinion is also consistent with the overall business circumstances. As previously described, Google faced an extremely competitive landscape with a very limited window of opportunity, and had to obtain the cooperation of numerous other mobile industry participants in order to make a successful launch of the Android Platform. Those industry participants were familiar with (and comfortable with) Java in mobile phones. Java represented a significant portion of the market at the time, and Google overtly capitalized upon that familiarity and comfort with the very important audience of carriers and OEMs. Furthermore, the technical expert evidence also shows that Android is dependent upon the Java APIs, that the Java APIs provided stability to the Android Platform during the critical launch period, and that the Java APIs are centrally important to the Android Platform and its most popular applications. Under these circumstances, use of the commingling standard is appropriate because the Java APIs are properly viewed as a “gating item” to the Android Platform.

### **7.2.2 Infringed Java Copyrights Enabled the Realization of Android Revenues**

273. As summarized in Exhibit 8, the Infringed Java Copyrights enabled the realization of revenue from advertising, the sale of Application, the sale of Digital Content, and the sale of Hardware.

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<sup>379</sup> Expert Report of James E. Malackowski, January 8, 2016, pp. 86 to 93



#### 7.2.2.1 Search, AdSense and Display Ad Revenues

274. Revised Exhibit 8.1 summarizes the annual Advertising Revenue Google realized from Android devices for the period 2008 through 2015.<sup>380</sup> As Revised Exhibit 8.1 illustrates, Google realized [REDACTED] in Ad Revenue during that eight-year period. The Leonard Report reflects the same [REDACTED] total, however, Dr. Leonard allocated Ad Revenue among Search, AdSense and Display for the four-year period 2008 to 2011. In Revised 8.1, I have updated my summary of Android Advertising Revenue to reflect Dr. Leonard's disclosures relating to the years 2008 to 2011.

275. As reflected in Revised Exhibit 8.1, the Advertising Revenue Google realized from Android devices grew from \$0.7 million in 2008, to an annualized total of [REDACTED] in 2015, and total [REDACTED] Search (AdWords) led with [REDACTED], followed by Display with [REDACTED], and AdSense with [REDACTED], during this eight-year time period.

#### 7.2.2.2 Application and Digital Content Revenues

276. Google began selling Apps through Android Market/Google Play in 2009. Exhibit 8 reflects Google's [REDACTED]<sup>381</sup> of total revenue from sales of paid-for-Apps downloaded from Android Market/Google Play, which [REDACTED] share totals [REDACTED] during the eight-year period 2008 to 2015.

277. Google began selling music, movies and other Digital Content through Android Market/Google Play in 2011. Exhibit 8 reflects 100 percent of the [REDACTED] of revenue from downloaded Digital Content through Android Market/Google Play for the years 2011 to 2015.<sup>382</sup>

#### 7.2.2.3 Android Devices including Nexus Smartphones ([REDACTED])

278. Google began selling Nexus devices in 2010. Exhibit 8 reflects to [REDACTED] of revenue Google realized from sales of Nexus phones, tablets, watches and accessories<sup>383</sup> for the years 2010 to 2015.

#### 7.2.3 Platform Contribution

279. Revised Exhibit 7 summarizes the profit Google realized through the Android platform during the period 2008 through 2015. As that Exhibit illustrates, from 2008 through 2015, Google realized [REDACTED] of profit from the Android platform during that eight-year time period. Revised Exhibit 7 reflects total TAC of [REDACTED]. This total is [REDACTED] higher than the total reflected in Exhibit 7 to my Initial Report, and reflects the annual estimates of Android TAC calculated in

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<sup>380</sup> Since my initial report, I understand that Jonathan Gold was deposed for a second day. I understand that during that second day, he prepared a chart of Google's Android-related revenues. Deposition of Jonathan Gold, January 29, 2016; Deposition Ex. 5119.

<sup>381</sup> Google shares App Revenue with App developers. Deposition of Jonathan Gold, December 11, 2005, p. 73.

<sup>382</sup> Deposition of Jonathan Gold, December 11, 2015, pp. 38–39, 72.

<sup>383</sup> Deposition of Jonathan Gold, December 11, 2015, p. 70.



Exhibit 7.2 for the years 2011 to 2015. I made this revision to ensure my TAC calculation was specific to the revenue streams at issue.

280. The Figure below is a summary of the analysis I performed to identify the portion of the profits Google realized through Android devices that is attributed to the Android platform, and therefore to the Java APIs.

**Figure 12**  
**Profit Apportioned to Infringed Java Copyrights**

Apportionment of Android Related Profit	<u>Amount</u> <u>(in millions)</u>
Gross Profit of Android Ad Revenues	[REDACTED]
Platform Contribution Factor	[REDACTED]
Advertising Gross Profit Apportioned to Platform	[REDACTED]
Plus: Gross Profit of Other Android Revenue	[REDACTED]
Less: Android Sales and Marketing Expense	[REDACTED]
Profits Apportioned to Infringed Java Copyrights	<u>\$8,829.4</u>

#### 7.2.3.1 Advertising Gross Profit Apportioned to Platform (And Therefore Infringed Java Copyrights)

281. As discussed above, in response to an Order regarding an Oracle Motion to Compel,<sup>384</sup> Google produced Google's Non-Android Mobile O.S. Partner List. For six Google non-Android Mobile O.S. Partners, this document provides: 1) the percentage of Search Revenue Google shares with the partner; 2) the total gross revenue earned by Google under the agreement; and 3) the Google search services which are the subject of each agreement. Exhibit 7.6 is a calculation of the weighted average percent of Search Revenue which Google shares with all six Partners reflected in Google's Non-Android Mobile O.S. Partner List. Exhibit 7.6 indicates that since 2006, Google has paid to non-Android Mobile Operating System Partners, [REDACTED] of the Search/Ad Revenue it earns from the mobile devices of those partners.

282. This factor of [REDACTED] represents an agreed-upon measure by Google and other disinterested third parties as to the value that the platform plays in generating the advertising revenue. Google agrees to pay the other non-Android mobile platform providers their share of the value generated by the advertising for their platforms.

283. When applied to Google's advertising revenues, this factor of [REDACTED] fairly represents the Android platform contribution to Google's mobile advertising business strategy. In the Figure above, I apply this factor to the gross profit from Android Ad Revenue of [REDACTED] to

<sup>384</sup> Order Re: Motion to Compel, 3:10-cv-03561-WHA, Docket No. 1436, January 20, 2016, p. 1..



determine the Ad Revenue attributed to the Android platform. As the Figure illustrates, [REDACTED] [REDACTED] of Android Ad Revenue is apportioned to the Android platform.

284. The remaining amount after applying the Platform Contribution Factor is not included in the disgorgement calculation. By giving Google credit for the other [REDACTED] of the profits, Google is receiving the value of its contributions for its advertising display network, its search engine, its branding and the other elements of value I identified in my Initial Report.
285. When it comes to the Platform, however, I have not further subdivided the value between the Infringed Java Copyrights and the Google contribution. As the technical analysis of Dr. Schmidt reveals, Google appears to have contributed only 26 percent of the code to the Platform and borrowed the remainder. On the other hand, Sun and Oracle unwillingly contributed code that turned out to be of vital importance to the Android Platform. This is where Google's commingling makes it extremely difficult to separate out the items of value. And, this is also where I have applied my judgment as an expert in light of the business circumstances that Google faced at the time to determine that the Java APIs were a gating item to the successful launch of the Android platform. In light of that significance, it is in my opinion appropriate to credit the Infringed Java Copyrights with the entire value of the Platform Contribution. Any other calculation risks allowing Google to retain a substantial portion of profits generated by the Infringed Java Copyrights.

#### 7.2.3.2 Gross Profit of Other Android Revenue

286. 100 percent of the gross profit Google realized from Applications and Digital Content sold through Android Market/Google Play and 100 percent of the loss from sales of Android Hardware is attributed to the Android platform. Exhibit 7.7 provides the calculation for the [REDACTED] figure reflected in the previous Figure. As Exhibit 7.7 illustrates, included within this calculation is [REDACTED] of Infrastructure and Other Cost of Sales.
287. The reason that 100 percent is credited to the Platform in these line items is because Google has already split the value of these revenues with its business partners, and therefore has obtained only that share they have determined represent its contribution. So, for example, the app developers publishing applications in the Google Play Store pay [REDACTED] to Google for its contribution. In my view, these agreements are a reasonable proxy for the platform contribution in the case of these lines of business.
288. As before, and for the same reasons explained above, I have not further subdivided the Platform Contribution. Indeed, given the dependency of popular Android applications on the Java APIs, one could certainly make the case that the contribution is even stronger with respect to these lines of business. However, my calculation does not expect Google to disgorge profits it did not realize.

#### 7.2.3.3 Certain Android Expenses

289. As reflected in the above Figure, 100 percent of Google's Sales and Marketing related operating expenses have been attributed to the Android platform.



290. The Google reported operating results for the Android platform summarized in Revised Exhibit 7 includes Android related Research and Development (“R&D”) and Legal Expenses. As part of my calculation of Platform Contribution, I have excluded these expenses.

291. In the case of [REDACTED] in legal expenses,<sup>385</sup> I do not consider it appropriate to deduct these expenses. I was willing to provisionally include them in my initial profit calculations pending an explanation by Google. However, Dr. Leonard’s report contains no basis for concluding that these expenses are variable with respect to producing the revenue at issue, as the Court has required. Deducting these expenses is also the equivalent of making Oracle pay a share of these expenses, which may be improper.

292. The same is true of R&D expenses. While I provisionally included them in my Initial Report, Dr. Leonard’s report offers no evidence demonstrating that they are variable rather than fixed expenses as required by the Court. I therefore removed the R&D costs in making my apportionment calculation. Further, I consider the costs Google incurred in connection with Android R&D to be an investment by Google. Even assuming Google is required to stop infringing the Java APIs, it does not lose the value of this investment. Google is not likely to entirely abandon the Android platform when it has 1.5 billion active users continuing to generate revenue. Treating this R&D expense as a capital expenditure in this context makes it the economic equivalent of an asset that Google will retain. Even if Google stops infringing, Oracle does not receive this asset. Oracle therefore should not pay for the asset. As reflected in Revised Exhibit 7, over the period 2008 to 2015, Google invested more than [REDACTED] in R&D in connection with the Android platform.

#### 7.2.3.4 Profit Apportioned to Infringed Java Copyrights

293. As illustrated in the Figure above, I attribute to the Android platform, and therefore to the Infringed Java Copyrights, \$8.8 billion of the [REDACTED] of total profit Google reported to have realized from the Android Platform during the years 2008 to 2015.

294. Google would face no financial difficulty if asked to disgorge this sum, as its public financial reports indicate that it possesses cash, cash equivalents and marketable securities exceeding \$73 billion.<sup>386</sup>

#### 7.2.4 Costs, Expenses and other Business Factors Considered

295. I have accounted for or otherwise considered the contribution of factors other than the Infringed Java Copyrights to the Android Platform. The specific costs, expenses, and other business factors I have considered in connection with my analysis include the following:

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<sup>385</sup> Expert Report of Dr. Leonard, February 8, 2016, Exhibit 1a.1, Note 4.

<sup>386</sup> Alphabet Inc., 2015 Form 10-K.



#### 7.2.4.1 Cost of Sales

- 296. The TAC Google incurred in connection with the AdSense and Display advertising programs is captured in the “Gross Profit from Android Ad Revenues” line item in the Figure above. The TAC Google incurs in connection with the AdWords (Search) advertising program is recorded by Google in App and Digital Content Cost of Sales, and is thus captured in the “Gross Profit of Other Android Revenue” line item of the above Figure.
- 297. The Cost of Sales of Apps, Digital Content and Hardware, including Infrastructure and Other Cost of Sales, is likewise captured in the “Gross Profit of Other Android Revenue” line item of the Figure above. Thus, I have considered and accounted for every Cost of Sale reported by Google as incurred in connection with the development and commercialization of the Android platform.

#### 7.2.4.2 R&D Costs

- 298. As discussed above, I consider Google’s [REDACTED] R&D investment to be an investment which represents the value Google attributed to the Android platform.

#### 7.2.4.3 Manufacturing Facilities and Other Tangible Assets

- 299. As discussed herein, as well as in my Initial Report, Google open sourced the Android source code which incentivized OEMs around the world to manufacture mobile devices that utilize the Android operating system. By doing so, Google accelerated its market entry while saving potentially billions of dollars of manufacturing-related expenditures.
- 300. The Infrastructure and Other Cost of Sales line item reflected in Revised Exhibit 7 is captured in the Figure above as part of “Gross Profit of Other Android Revenue.” According to Mr. Jonathan Gold, Infrastructure and Other Cost of Sales includes the cost of items used by Google in the manufacturing and shipping of Android-related products and services, including such things as Google laptop computers for employees associated with customer support and “payment processing.”<sup>387</sup> Thus, I accounted for or otherwise considered all of Google’s capital expenditures relating to the development and commercialization of the Android platform.

#### 7.2.4.4 Retail Sales Expenses

- 301. Google entered into agreements with wireless carriers such as T-Mobile, Vodafone, NTT DoCoMo and Verizon to provide incentives to adopt the Android operating system for devices compatible with their wireless networks.<sup>388</sup> In so doing, Google established retail outlets for its Android devices, and avoided the high cost of buying or renting retail space around the Country and around the world, as well as the cost of employing and training retail sales representatives.

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<sup>387</sup> Deposition of Jonathan Gold, December 11, 2015, pp. 107 – 108, 126.

<sup>388</sup> GOOGLE-12-00134317 (Google internal email forwarding 11/6/2007 WSJ discussing OHA announcement and Google deals with HTC, Samsung, Motorola, T-Mobile, Sprint, Nextel, NTT DoCoMo).



#### 7.2.4.5 Sales and Marketing Expense

302. Revised Exhibit 7 reflects the Sales Expense of [REDACTED], and Marketing Expense of [REDACTED] [REDACTED] that Google reported as relating to the commercialization of the Android platform. These expenses are captured in the Figure above.

303. A May 2015 Google presentation entitled "Introduction to Android," indicates that Google expected to pay [REDACTED] in 2015 to its Android carrier Distribution Partners, OEMs, and Retail Partners through revenue-sharing agreements, channel incentives, and rent.<sup>389</sup> According to Mr. Gold, to the extent Google actually incurred these costs in 2015, they are recorded as App Cost of Sales, Digital Content Cost of Sales, and likely Sales Expense and Marketing Expense.<sup>390</sup> Because these costs are all captured in Revised Exhibit 7 as well as in the Figure above, I have accounted for and otherwise considered all costs associated with the sales and marketing of Android devices.

#### 7.2.4.6 Legal Expenses

304. During the eight-year period 2008 to 2015, Google reported Android-related legal expenses not relating to this matter of [REDACTED]. These expenses are reflected in Revised Exhibit 7. Due to the unknown nature of these expenses, I do not attribute them to the Android platform in the Figure above. Thus, I have accounted for or otherwise considered this and every other Operating Expense Google reported as relating to the Android platform in its contemporary business records.

#### 7.2.4.7 Conclusion Concerning Value of the Infringed Java Copyrights

305. I have considered all of the costs and expenses Google reported as having been incurred in connection with the research, development and commercialization of the Android platform. In the Figure below, these costs and expenses are deducted from the Ad Revenues apportioned to the Android platform, as well as revenues from sales of Applications, Digital Content, and Hardware. This results in \$8.8 billion of profit attributed to the Infringed Java Copyrights.

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<sup>389</sup> GOOG-00130338 – 386 at 340.

<sup>390</sup> Exhibit 7 of my Initial Report.



**Figure 13**  
**Profits Apportioned to Infringed Java Copyrights**

Apportionment of Android Related Profit	<u>Amount (in millions)</u>
Gross Profit of Android Ad Revenues	[REDACTED]
Platform Contribution Factor	[REDACTED]
Advertising Gross Profit Apportioned to Platform	[REDACTED]
Plus: Gross Profit of Other Android Revenue	[REDACTED]
Less: Android Sales and Marketing Expense	[REDACTED]
Profits Apportioned to Infringed Java Copyrights	<u>\$8,829.4</u>

## 8. STATUTORY DAMAGES

306. In my Initial Report, I calculated statutory damages relating to four copyrighted works. Based on the Court's Order Re Google's Motion To Strike dated February 5, 2016, I understand only the following two copyrighted works remain at issue in this case.

- Certificate of Registration, Java 2 Standard Edition 1.4, TX0006196514, Trial Ex. 464;
- Certificate of Registration, Java 2 Standard Edition 5.0, TX0006066538, Trial Ex. 475;

307. Pursuant to the Copyright Act, Oracle is entitled to one award of statutory damages per work for Google's infringement, ranging from \$750-\$30,000 per work for non-willful infringement. For willful infringement, Oracle may be awarded up to \$150,000 per work.

308. I have been asked, based on my professional experience and in light of the available evidence, to calculate the appropriate statutory damages figure. I understand that Oracle may elect to receive statutory damages under the Copyright Act instead of actual damages and disgorgement of profits.

309. It remains my opinion that, based on my review of evidence, that due to the significant lost opportunity costs to Oracle arising from Google's infringement of the copyrighted Java works (as set forth herein) and the magnitude of the benefit obtained by Google as a result of their copying of the works (also as set forth in this report), the benefits to Google far exceed the available statutory range, and thus Oracle should be awarded the maximum amount available under the statute.

310. If Google's infringement is not found to be willful, Oracle should be awarded statutory damages of \$30,000 per work for a total of \$60,000.

311. If Google's infringement is found to be willful, Oracle should be awarded statutory damages in the amount of \$150,000 per work for a total of \$300,000.



**9. PREJUDGMENT INTEREST**

312. From an economic analysis standpoint, a time-value-of-money award would be necessary to compensate Oracle for the loss of use of funds during the damages period. However, I understand that an award of prejudgment interest is a legal matter and that the Court has substantial discretion in determining the interest rate and compounding method to be awarded. I have not prepared any prejudgment interest calculations as of this date, but am prepared to do so if requested by the Court.

**10. SIGNATURE**

313. I declare under penalty of perjury that the forgoing is a true and correct summary of my opinions in this matter,

A handwritten signature in black ink, appearing to read "James E. Malackowski".

February 29, 2016

James E. Malackowski

Date



**OCEAN TOMO®**  
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February 6, 2016

## **JAMES E. MALACKOWSKI CURRICULUM VITAE**

**James E. Malackowski** is the Chairman and Chief Executive Officer of Ocean Tomo, LLC, the Intellectual Capital Merchant Banc™ firm providing industry leading financial products and services related to intellectual property including financial expert testimony, valuation, strategy consulting, proprietary research products, investment services, risk management products, innovation management services and transaction brokerage. Ocean Tomo assists clients – corporations, law firms, governments and institutional investors – in realizing Intellectual Capital Equity® value broadly defined. Subsidiaries of Ocean Tomo include: Ocean Tomo Risk Management, LLC; Ocean Tomo Asset Management LLC; OTI Data Networks, LLC; Patent Marking, LLC; and Ocean Tomo Capital, LLC – publisher of the Ocean Tomo 300® Patent Index family (NYSE: OTPAT) and Ocean Tomo Investments Group, LLC, a registered broker dealer. Ocean Tomo is the creator of the live public open cry auction marketplace for intellectual property and the exclusive source for Ocean Tomo Ratings™.

Mr. Malackowski is a founding and continuous member of the IP Hall of Fame Academy. He has been recognized annually since 2007 by leading industry publications as one of the ‘World’s Leading IP Strategists’. Significantly, Mr. Malackowski is listed among “50 Under 45” by *IP Law & Business*™, included in the *National Law Journal’s* inaugural list of 50 Intellectual Property Trailblazers & Pioneers; and, named as one of “The Most Influential People in IP” by *Managing Intellectual Property*™. Mr. Malackowski was named as 1 of 50 individuals, companies and institutions that framed the first 50 issues of *IAM Magazine* as well as 1 of 60 leading global Economics Expert Witnesses by the same publication in 2014. In 2011 Mr. Malackowski was selected by the World Economic Forum as one of less than twenty members of the Network of Global Agenda Councils to focus on questions of IP policy. In 2013 he was inducted into the Chicago Area Entrepreneurship Hall of Fame by the Institute for Entrepreneurial Studies at the University of Illinois at Chicago College of Business Administration.

Mr. Malackowski has advised clients and counsel on business valuation issues as well as all phases of the technology transfer process. He has substantial experience as a Board Director for leading technology corporations and research organizations as well as companies with critical brand management issues. He is Past President of The Licensing Executives Society International, Inc. as well as its largest chapter, LES USA & Canada, Inc. Today, Mr. Malackowski focuses his non-for-profit efforts with organizations leveraging science and innovation for the benefit of children, including those located in lesser developed countries. He is a Director of the Stanley Manne Children’s Research Institute and has served since 2002 as a Trustee or Director of Invent Now, Inc., an organization providing summer enrichment programs for more than 90,000 students annually. He is the Founder of the Chicago based Center for Applied Innovation (CAI), an Illinois non-for-profit corporation created to manage education, public policy outreach and related economic activity around applied technology and intellectual property rights.

Mr. Malackowski is a frequent speaker on emerging technology markets and related financial measures. He has addressed mass media audiences including Bloomberg Morning Call, Bloomberg Evening Market Pulse, Bloomberg Final Word, CNBC Closing Bell, CNBC On the Money, CNBC Street Signs, CBS News Radio and Fox Business National Television as well as other recognized news-based internet video channels. Mr. Malackowski is a judge on behalf of the Illinois Technology Association’s CityLIGHTS™ Innovation Awards program and has also appeared as a judge on PBS’s *Everyday Edisons*.



On more than fifty occasions, Mr. Malackowski has served as an expert in U.S. Federal Court, U.S. Bankruptcy Court, State Court, the Ontario Superior Court of Justice or the International Trade Commission on questions relating to intellectual property economics including the subject of business valuation, reasonable royalty, lost profits, price erosion, commercial success, corrective advertising, creditor allocations, Hatch Waxman Act market exclusivity, business significance of licensing terms including RAND obligations, and equities of a potential injunction. As an inventor, Mr. Malackowski has more than twenty issued U.S. patents. He is a frequent instructor for graduate studies on IP management and markets and a Summa Cum Laude graduate of the University of Notre Dame majoring in accountancy and philosophy. Mr. Malackowski is Certified in Financial Forensics, a Certified Licensing Professional and a Registered Certified Public Accountant in the State of Illinois.

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**PRINCIPAL  
EXPERIENCE**

Co-Founder, Chairman and Chief Executive Officer, *Ocean Tomo, LLC*, July 1, 2003 to present. Mr. Malackowski is responsible for all aspects of the firm's merchant banking practice.

Founder and Chairman, *3Discovered, LLC*. The company was formed as a collaborative venture between Ocean Tomo, LLC and Liberty Advisor Group in 2013. 3Discovered is a current portfolio company of US-based venture capital firm AITV.

Founder, *The Intellectual Property Exchange International, Inc.* Mr. Malackowski guided initial product development of IPXI and recruitment of executive management. In 2011, IPXI was funded by an industry consortium including the Chicago Board Options Exchange. Mr. Malackowski was the Chair or Co-Chair of the Exchange from inception to February 26, 2015.

President and Chief Executive Officer, *IP Equity Management, LLC*, doing business as Duff & Phelps Capital Partners, March 1, 2002 to June 30, 2003. The firm's intellectual property structured finance efforts were consolidated with Ocean Tomo on July 1, 2003.

Principal and Founder, *VIGIC Services, LLC*, July 1, 2000 to February 28, 2002. Mr. Malackowski identified and evaluated intellectual capital based private equity investment opportunities and served as an advisor to four completed transactions.

Principal and co-Founder, *IPC Group LLC*, August 1, 1988 – June 30, 2000. Mr. Malackowski also held the offices of President and CEO and was a Board member / chairman of the firm. Along with four co-founders, Mr. Malackowski grew IPC Group to become the largest professional services firm specializing in intellectual property valuation and strategy consulting. IPC Group was sold in 1999 later changing its name to InteCap.

Executive Consultant, *Peterson & Co. Consulting*, Chicago, June 3, 1985 – July 30, 1988. Mr. Malackowski began with Peterson as a Staff Consultant and was the firm's quickest promotion to both Senior Consultant and Executive Consultant. Mr. Malackowski helped to establish the firm's intellectual property litigation and valuation practice. Peterson & Co. was sold to Saatchi & Saatchi PLC in 1988.



Chairman and CEO, *JEMAN Technologies, Inc.* 1995 – 1999. Mr. Malackowski led the company's efforts to develop new technologies related to wireless direct response services. JEMAN was sold to ewireless, Inc. in 1999 as part of a venture transaction funded by Bedrock Capital Partners and Tredegar Investments.

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**NON-PROFIT AND  
ASSOCIATION  
EXPERIENCE**

Mr. Malackowski has been active in The Licensing Executives Society (LES) locally, nationally and internationally. LES is the premiere global professional association of technology transfer and intellectual asset management professionals with more than 10,000 members in more than 32 countries.

Mr. Malackowski is Past President of the Licensing Executives Society International, LLC, where his experience included the following positions:

- Chair, Past President's Council (2012 – 2013)
- President and Member of the Board (2011 - 2012)
- President Elect and Member of the Board (2010 - 2011)
- Secretary and Member of the Board (2007 - 2010)
- Member and Permanent Alternate, Board of Delegates (1992 - 2005)
- Past Chair, Membership, Investment, Education, Long-range Planning and Global Technology Impact Forum Committees.

Mr. Malackowski's term as President of LESI has been recognized for creation of the LESI Global Technology Impact Forum and concurrent Invent For Humanity™ Technology Transfer Exchange Fair; formalizing the National Presidents' Council; establishing the position of a permanent Executive Director; and, restructuring the leadership of LESI committees utilizing a Chair, Past Chair, Chair Elect ladder combined with functional responsibilities for committee Vice Chairs. This later organizational stamp is based largely on Mr. Malackowski's experience as President of LES USA & Canada described below where he led a restructuring of the Board from a regional to a functional focus for each officer and Trustee. As with his tenure at his national Society discussed below, Mr. Malackowski led a financial turn-around returning LESI to positive cash flow following its' only two years of loss.

Mr. Malackowski is also Past President of The Licensing Executives Society (USA and Canada), Inc. where he held numerous offices in the organization including:

- President and Member of the Board (2001 – 2002)
- International Vice President and Member of the Board (2000)
- Treasurer and Member of the Board (1996 -- 1999)
- Trustee and Member of the Board (1992 – 1996)
- Chair, Annual Meeting in Miami Beach (1998) and the Summer Meeting in Chicago (1997)

Mr. Malackowski presided over a restructuring of the LES USA & Canada Board and a financial turn-around returning the organization to positive cash



flow following its only two years of loss. Mr. Malackowski is the youngest President to hold office at LES USA & Canada as well as at LES International.

In 2007, Mr. Malackowski was the Founding Chair of the Board of Governors for what is now Certified Licensing Professionals, Inc., administrator of the Certified Licensing Professional (CLP) program for professionals in the fields of licensing, business development and commercialization of intellectual property. More than 1,000 individuals involved in patenting, marketing, valuation, IP law, negotiation, and intellectual asset management have earned the CLP certification. CLP, Inc. is a 501(c)(6) organization whose mission is to elevate the licensing profession through knowledge and standards.

Mr. Malackowski extends significant time to non-profit activities directed towards a further understanding of the economic importance of innovation and intellectual property, in both the United States and developing economies. These efforts include:

- Judge, Illinois Technology Association, CityLIGHTSTM Innovation Awards (2013 - )
- Member, World Economic Forum Network of Global Agenda Councils (2011 - 2012)
- Director, International Intellectual Property Institute, Washington D.C., (2002 - 2007)
- Resident Advisor, U.S. Information Agency, (1999)
- Resident Advisor, U.S. Department of Commerce Commercial Law and Development Program (1997)
- Founder and Chairman, The Center for Applied Innovation, Inc. (2004 - )

In addition to his University instruction described herein, Mr. Malackowski focuses his non-for-profit efforts with those organizations leveraging science and innovation for the benefit of children.

- Director, Children's Research Fund (2013); Co-Chair Annual Fund Campaign (2013)
- Director, Invent Now, Inc. (2006 - ); Trustee and Director, National Inventors Hall of Fame, Inc. (2001 - 2006); and, Member, NIHF Board Finance Committee (2006 - ). These organizations provide summer enrichment programs for more than 90,000 students annually including Camp Invention™ for kids in grades 1-6 (and their parents and teachers); Collegiate Inventors Competition™ for college students (and their mentors); and, Club Invention™ for kids in grades 1-6 (and their parents and teachers).
- President's Council, Chicago Museum of Science and Industry (2005 - 2011) including participation on the Education Advisory Committee (2007 - 2009) and the Alternative Revenue Committee (2008 - 2011)
- Director, Stanley Manne Children's Research Institute (2009 - 2018) including Chair of the Board's Technology Transfer Committee (2014 - ) and the Strategic Planning Resources Committee (2011 - 2012)

Mr. Malackowski is the Founder of the Center for Applied Innovation, a Chicago based non-for-profit with both local and international programs. CAI



was created to manage education, public policy outreach and related economic activity around applied technology and intellectual property (IP) rights in the State of Illinois and around the world.

- CAI created and patented the first commoditized contract for technology licensing, the Unit License Right™. This innovation has been licensed to the Chicago-based Intellectual Property Exchange International.
- Under Mr. Malackowski's continued leadership as Chairman, CAI organizes the Invent for Humanity™ Technology Transfer Exchange Fair (InventforHumanity.org) launched in January, 2012, in Geneva, Switzerland. Invent for Humanity showcases field-ready, sustainable innovations, known as "appropriate technologies", leveraging the experience of licensing professionals to match and structure the actual transfer of such technology to meet recognized needs of emerging market economies.

Mr. Malackowski's association and non-profit activities are informed in part by his participation in the Harvard Business School Executive Education Program on Governing for Nonprofit Excellence, November 2000.

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**RELATED OFFICES**

Berg, LLC, Member, Council of Advisors, Senior Advisor, Intellectual Property Licensing & Innovation (2012 - )

Curious Networks, Inc., Director, (1999 - 2000), Co-Chair of the Board's Strategic Partnership Committee. Mr. Malackowski led the company's first and second round of venture funding.

ewireless, Inc. (f/k/a JEMAN Holdings, Inc. d/b/a Cellular Linking), Director, (1995-1999, 2000-2002)

Ford Global Technologies, Inc., Ford Motor Company, Director (1997 - 2001). Mr. Malackowski advised Ford Motor Company on the original business strategy which led to the formation of FGTI. FGTI was the largest known technology management company in the United States during Mr. Malackowski's term.

Infocast, Corporation (OTC BB: IFCC.OB), Director (2001-2002). Member of the Audit and Compensation Committees. Mr. Malackowski led the transition of the company's senior management team and continued U.S. based funding efforts.

Insignis, Inc., Director (2000 - 2002) Mr. Malackowski led the company's first round of venture funding. Insignis is a Chicago based provider of institutional financial data services.

Solutionary, Inc., Director (2000 - 2013). Arranged and advised on Solutionary's asset acquisition of S3Networks effective August 31, 2001 and sale to strategic buyer in 2013. Member of the Board's Compensation Committee.



TuShare, LLC, Advisor (2012 - )

422, Inc., Director (2002 - 2003)

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**EDUCATION AND CERTIFICATION**

University of Notre Dame, B.B.A., Bachelor of Business Administration with majors in Accountancy and Philosophy. Graduated Summa Cum Laude, 1985.

Registered Certified Public Accountant, State of Illinois Certificate Number 41,187 issued January 16, 1986; License No. 239.007831; Expires September 30, 2018.

Certified Licensing Professional, Certificate Number 1606 issued July 1, 2008; Expires June 30, 2017.

Certified in Financial Forensics, CFF™, American Institute of Certified Public Accountants, Certificate Number 391 issued July 31, 2008; Expires December 31, 2014.

Accredited in Business Valuation, ABV™, American Institute of Certified Public Accountants, Certificate Number 4278 issued May 31, 2014.

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**UNIVERSITY INSTRUCTION**

John Marshall Law School, Intellectual Property Damages (1992 - 1994)

DePaul University, Intellectual Property Entrepreneurial Finance (2003)

The George Washington University Law School, Intellectual Property Management (2004)

The University of Chicago Graduate School of Business:

- Intellectual Property Investment (2004 - 2006)
- Entrepreneurial Discovery, MBA Course 34705, Adjunct Professors Mark Tebbe and Brian Coe (Fall 2014 - 2015)

Indiana University Kelly School of Business, Intellectual Property Finance (2005)

University of Notre Dame, Mendoza College of Business, Adjunct Instructor:

- MBA Interterm Intensives, Intellectual Property Based Market Transactions, Valuation and Trading (Fall 2006, Fall 2008)
- MBA Executive Program, Course MBA 70639, Intellectual Property, (Spring Semester 2008)
- MBA Program, Litigation Support and Valuation (Spring 2009)

University of California at Berkeley Haas School of Business, Innovation Markets (2008)



Chicago-Kent College of Law, Adjunct Professor of Law, IP Financial Markets and Legal Principles (Fall 2008)

Rutgers Professional Science Master's Program, Fundamentals of Intellectual Property (Summer 2011)

Northwestern University Kellogg School of Management, MGMT 441-61 and MGMT 441-76 Intellectual Property Management, Clinical Professor James G. Conley (Fall 2012, Spring 2013, Spring 2014, Spring 2015)

University of Texas McCombs School of Business, MBA Course: Open Innovation, Professor Sirkka Jarvenpaa (Spring 2013)

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<b>ACTIVE MEMBERSHIPS</b>	American Institute of Certified Public Accountants, Member 01182237 (1985 -) The Economic Club of Chicago (1990 - ) The Licensing Executives Society (1988 - ) Young Presidents' Organization - World President's Organization (2006 - )
<b>RECOGNITION AND AWARDS</b>	<p>Individually, Mr. Malackowski has been recognized for his expertise as well as his work in developing markets for intellectual property transfer including:</p> <ul style="list-style-type: none"><li>• Named to the <i>National Law Journal's</i> inaugural list of 50 Intellectual Property Trailblazers &amp; Pioneers. (August 2014)</li><li>• Named as 1 of 60 leading global Economics Expert Witnesses in the <i>IAM Patent 1000, IAM Magazine</i>. Selection based on interviews by IAM researchers with more than 100 patent litigators. (May 2014)</li><li>• Inductee, Chicago Area Entrepreneurship Hall of Fame as selected by the Institute for Entrepreneurial Studies at the University of Illinois at Chicago College of Business Administration, (2013; 28<sup>th</sup> Year of Program)</li><li>• Named as 1 of 50 Individuals, Companies and Institutions that Framed the First 50 Issues of <i>IAM Magazine</i>, November / December 2011.</li><li>• “IP Personalities of 2008”, <i>IAM blog</i> by Joff Wild, Editor</li><li>• “IAM Strategy 300: The World’s Leading IP Strategists”, <i>IAM Magazine</i> (2012-2015)</li><li>• “IAM Patent 1000: The World’s Leading Patent Professionals”, <i>IAM Magazine</i> (2015)</li><li>• “World’s 250 Leading IP Strategists”, <i>IAM Magazine</i> (2009-2011)</li><li>• “50 Under 45”, <i>IP Law &amp; Business™</i> (2008)</li><li>• “The Most Influential People in IP”, <i>Managing Intellectual Property™</i> (2007)</li><li>• Member, IP Hall of Fame Academy (2007- )</li><li>• Mediator and Arbitrator, World Intellectual Property Organization, (1994)</li></ul>

Ocean Tomo as a firm has been likewise recognized for its accomplishments including:



- Ocean Tomo was recognized as a member of the *2015 Inc. 5000®* list of fastest-growing private companies in America.
- Ocean Tomo was honored in 2011 with the “Best of Chicago Award in Investment Advisory Services” by the U.S. Commerce Association (USCA).
- In addition to Mr. Malackowski, Ocean Tomo as a firm was named as 1 of 50 Individuals, Companies and Institutions that Framed the First 50 Issues of *IAM Magazine*, November / December 2011 and the only firm other than Microsoft (2 of 50 mentions) to be recognized multiple times (5 of 50 mentions).
- The firm’s Chicago office was presented the *2011 Alfred P. Sloan Awards for Business Excellence in Workplace Flexibility* after having been finalist for scoring in the top 20% of all firm’s measured nationally.
- Ocean Tomo was recognized in 2010 by Corporate Voices for Working Families for its work-life balance as part of the National Workplace Flexibility Campaign published by *USA Today*.
- Ocean Tomo was recognized as a juried Finalist for the Illinois Technology Association 2010 CityLIGHTS Award for raising the stature of the Illinois technology industry.
- Selected as case study organization for Haas School of Business, University of California, Berkeley (2009)
- Selected as case study organization for Harvard Business School MBA Program (2008)
- Ocean Tomo was named one of 20 small and mid-sized firms recognized as the “Best Places to Work in Illinois” by Best Companies Group in a competition sponsored by the Illinois Chamber of Commerce and the Illinois State Council Society for Human Resource (2007)
- Ocean Tomo Auctions received the 2006 Chicago Innovation Award for most innovative new product or service introduced between January 1, 2005, and July 31, 2006, that uniquely satisfied unmet needs in the marketplace. The award was presented by Kuczmarski & Associates and the *Chicago Sun-Times*.
- Ocean Tomo Auctions was awarded the Department of Commerce Technology Administration & National Knowledge & Intellectual Property Management 2006 Innovator of the Year Award.
- Ocean Tomo was recognized as a “Top Ten IP Newsmakers of 2006” by *IP Law & Business*, Almanac 2006.

Numerous authors and graduate business programs have written case studies about Ocean Tomo and its affiliates including:

- Piscione, Deborah Perry, [The Risk Factor](#), Copyright 2014.
- Houle, David, [Entering the Shift Age](#), Copyright 2013.
- Kuczmarski, Thomas D., Dan Miller and Luke Tanen, [Innovating Chicago-Style: How Local Innovators Are Building The National Economy](#), Copyright 2012.
- Houle, David, [The Shift Age](#), Copyright 2007.
- Chesbrough, Henry, [Open Business Models: How to Thrive in the New Innovation Landscape](#), Copyright 2006.
- Harvard Business School Case Study
- University of California Business School Case Study



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**RELATED U.S.  
SPEECHES AND  
PUBLICATIONS**

“The Determination of a Reasonable Royalty: Hypothetical Negotiation v. A General License Agreement”, The Licensing Executives Society, Chicago Chapter, December 8, 1987.

“The Business Economics of Technology Development”, The Licensing Executives Society, New England Chapter, February 9, 1988.

“The Importance of Protecting Intellectual Property Through Corporate Transition”, Licensing Executives Society, National Meeting, October 18, 1989, Moderator.

“Valuation of Intellectual Property Rights”, The Chicago Bar Association, March 6, 1990.

“Dispute Resolution -- There Are Alternatives!”, Licensing Executives Society, National Meeting, October 22, 1990.

“How to Value a License”, Adding to the Bottomline Through Licensing, LES / John Marshall Law School, November 1, 1990.

“An Advanced Discussion on Licensing and Patent Damages”, Licensing Executives Society, National Meeting, October 28, 1992.

“An Advanced Discussion on Patent Damages”, Licensing Executives Society, National Meeting, October 18, 1993.

Royalty Provisions in Technology License Agreements, Technology Transfers, American Conference Institute, November 15 & 16, 1993.

“Commercializing Technology and the Intellectual Property Quality Management Imperative”, Technology Transfer, American Conference Institute, June 20 & 21, 1994.

“How to Accurately Value Software”, The Software Protection and Litigation Institute, July 28 & 29, 1994.

“IP Damages Advanced Case Studies”, Licensing Executives Society, National Meeting, October 19, 1994.

“Preparation and Presentation of Damages by Outside Consultants”, AIPLA Mid-Winter Meeting, February 1, 1995

“Damages Discovery - An Expert's Perspective”, Intellectual Property Law Association, New York, December 15, 1995.

“Pre-Litigation Damages Techniques: Patents and More”, The Intellectual Property Strategist, March, 1996.



“Corporate Exposures to Copyright, Patent, Trademark, and Trade Secret Claims”, Digital Bullets - Digital Shields: A Financial Perspective, American Conference Institute, New York, March 5, 1996.

“IP Management and Taxation - How companies are proactively managing IP assets to maximize shareholder value, including measuring contribution of IP protection to corporate value”, American Bar Association, Virginia, April 11, 1996.

“Effectively Select & Use Experts in Trademark & Copyright Cases”, AIPLA Spring Meeting, Boston, May 1, 1996.

“The Industry-University Interface: Mechanisms For Technology Transfer”, 1996 AUTM Central Region / Licensing Executives Society Chicago Chapter, Chicago, July 21, 1996.

“Valuing Health Care Technologies”, Licensing Executives Society Winter Meeting, South Carolina, March 13, 1997.

“Creative Marketing & Packaging - How to Differentiate Yourself in a Competitive Market”, CTIA Annual Meeting, Atlanta, February 23, 1998.

“Intellectual Property Valuation: The Latest Techniques from Boardroom and Courtroom”, Patent Law Association of South Florida Annual Meeting, Fort Lauderdale, October 22, 1998.

“The Aftermath of *Rite-Hite v. Kelly*”, 16<sup>th</sup> Judicial Conference of the U.S. Court of Appeals for the Federal Circuit, Washington D.C., April 6, 1999.

“Expert Admissibility After Daubert”, Wisconsin Academy of Trial Lawyers, Milwaukee, December 3, 1999.

“Intellectual Property Strategic Planning: a Corporate Perspective”, Research Directors Association of Chicago, Winter Meeting, January 10, 2000.

“Intellectual Property Asset Management: Linking IP and Corporate Strategy”, 44<sup>th</sup> Annual Conference on Developments in Intellectual Property Law, John Marshall Law School, Chicago, February 25, 2000.

“Boost Your Client’s Intellectual Capital IQ: Get Top Management Involved”, Corporate Legal Times, October 2000, p. 104.

“Strategic and Financial Opportunities for Privately Held and Public Middle Market Companies: Building Shareholder Value”, The Standard Club, Chicago, October 5, 2000.

“Commercializing Intellectual Capital Through Venture Funding”, LESI Expanded Board of Directors Meeting and Seminar, Delray Beach, Florida, January 26, 2001; LES Chicago Meeting, May 10, 2001.



“New Paths to Growth: Joint Ventures and Accessing Equity Capital”, Panel Presentation and Discussion, LaSalle Street Project Economic Summit, Chicago, May 10, 2001.

*ViewPoints*, The Newsletter of the Licensing Executives Society (U.S.A. and Canada), Inc., President’s Column: Vol. VIII No. 5, Nov. / Dec. 2001, “President Changes the Way LES Does Business”; Vol. VIV No. 1, Jan. / Feb. 2002, “It’s Time To Count Our Intellectual Assets”; Vol. VIV No. 2; Vol. VIV No. 3, May / June 2002, “Mid-Year Review”; Vol. VIV No. 4, July / August 2002, “Ethical Issues Related To Intellectual Property”.

“Venture Investment Grounded In Intellectual Capital”, From Ideas To Assets: Investing Wisely in Intellectual Property, Edited by Bruce Berman, John Wiley & Sons, Inc., 2002.

“Current Issues in Accounting for Intangibles”, Congressional Economic Leadership Institute, Panel Presentation and Discussion with Steven H. Wallman, Former Commissioner, United States Securities and Exchange Commission, Washington, DC, May 1, 2002.

“Intellectual Capital Based Corporate Carve-outs: Strategy, Structure and Funding”, James E. Malackowski and Suzanne Harrison, The LESI Guide to Licensing Best Practices, Edited by Robert Goldscheider, John Wiley & Sons, Inc., 2002.

“Intellectual Property Finance: Securitization to Venture Capital”, American Bar Association Intellectual Property Law Conference, Philadelphia, June 28, 2002.

“The IUPI Roundtable: The New Emphasis on Patent Value – Opportunities and Challenges”, Washington DC, July 22, 2002.

“Moving Technology from University to Marketplace: Business Creation and the Venture Capital Community, Licensing Executives Society Annual Conference, Chicago, September 24, 2002.

“Presidents’ Forum on Intellectual Property: A Leadership Discussion with The Licensing Executives Society, the American Intellectual Property Law Association, the Association of University Technology Managers, the Intellectual Property Owners Association, The National Inventors Hall of Fame, and BIO”, Licensing Executives Society Annual Conference, Chicago, September 24, 2002.

“Extracting Value From Your Intellectual Asset Portfolio: Ensuring ROI from IP and Technology Assets”, World Research Group, November 22, 2002, Chicago, Illinois.

“Licensing”, American Intellectual Property Law Association 2003 Mid-Winter Institute, Marco Island, Florida, January 22 – 25, 2003.

“Cashing in on Chicago: A Closer Look at Liquidity in the Heartland”, The Executives’ Club of Chicago, Panel Discussion, February 11, 2003.



Conference Chair and Speaker, "Optimizing Valuation & Value Realization of your IP/Intellectual Assets", World Research Group, Las Vegas, February 27-28, 2003.

Live Webcast, "Turning Your Intellectual Property into Cash", Ernst & Young Business Insights, April 28, 2003.

Intermediate PDS Workshop: Application of Private Equity and Leveraged Finance Investing to Intellectual Property, LES / AUTM Summer Meeting, Philadelphia, May 8, 2003.

World Research Group, Advanced Intellectual Property Structured Finance, Conference Co-Chair Person, New York City, June 29-30, 2003.

The Conference Board, The 2003 Conference on Intellectual Asset Management & Value Reporting, "Application of Private Equity and Leveraged Finance Investing to Intellectual Property", Chicago, June 4, 2003.

Intellectual Property and Information Technology for Investment Funds, "Intellectual Capital Equity Management", Panel Discussion Sponsored by Schulte Roth & Zabel, New York City, June 18, 2003.

Chicago Capital Access Forum III, "Private Investors: The Case for Domestic Emerging Market Investments", Panel Discussion, Chicago, June 26, 2003.

Pension Consultants' Forum, "Extracting Value from Private Equity Investing", World Research Group, Chicago, July 22, 2003.

Midwest Intellectual Property Institute, "Intellectual Capital Equity Management", Minneapolis, September 19, 2003.

"Intellectual Asset Strategies", Add-On Seminar at the 2003 Licensing Executives Society Annual Meeting, San Diego, September 25, 2003.

"Leveraging Intellectual Property", Keynote Speaker, Thomson Financial Thought Leadership Forum, New York, October 8, 2003.

"Beyond Licensing: Innovative Techniques for Extracting Value", Advanced Forum on Licensing Intellectual Property, San Francisco, December 9, 2003.

Intellectual Asset Management, Column: *IP Merchant Banker*, Douglas R. Elliott & James E. Malackowski, Issue 01, "Challenges of the Fifth Epoch", July / August 2003; Issue 02, "What the Market Foretells", September / October 2003; Issue 03, "Economics, Ethos and Intellectual Ethics", December / January 2004; Issue 04, "Patent Predictions – facts or fictions?", February / March 2004; "Wealth management in the age of patents", June / July 2004; "Patent pools – the 80% solution", August / September 2004.

"Intellectual Capital Equity Management: IP as an Asset Class", Minnesota State Bar Association Continuing Legal Education, Minneapolis, January 15-16, 2004.



“Understanding the Motivations Behind an IP Structured Finance Transaction”,  
“Analyzing the Anatomy of A Patent-Based Structured Finance Transaction”,  
World Research Group, New York, January 21-22, 2004.

“Managing Your Intellectual Property”, Investment Banking for Women /  
Minority Owned Business Enterprises, Annual Forum, Conference Co-  
Chairperson, Chicago, March 3-5, 2004.

“Private Equity: Investor Capital for Mature Businesses”, DreamMakers Forum  
2004, Santa Barbara, California, March 7 – 10, 2004.

“IP Finance: Convergence of IP Valuation and Value Creation”, World  
Research Group 2<sup>nd</sup> Annual Strategies and Solutions for Optimizing IP  
Valuation & Value Creation, Chicago, March 23 – 24, 2004.

“Leveraging the Value of Intellectual Property”, Creating, Managing & Valuing  
an Intellectual Property Portfolio, Vedder Price Conference Series, Chicago,  
April 28, 2004.

“Federal Circuit Damages Decision Emphasizes the Importance of Sound  
Economic Models”, IP Review, McDermott Will & Emery, with Robert M.  
Hess, Spring 2004.

“Intellectual Property Merchant Banking: Leveraging Corporate Intangible  
Assets”, The Licensing Executives Society (U.S.A. & Canada), Inc., Fairfield-  
Westchester Counties Chapter, June 23, 2004.

“Intellectual Property Financing and Securitization: Conclusions and Future  
Implications for Financing the IP Market”, New York, New York, July 21,  
2004.

“Emerging Financial Concepts in IP Asset Management”, Mining Patent  
Portfolios, Seattle, Washington, September 13, 2004.

“Intellectual Property Investment”, National Institutes of Health,  
Commercialization Assistance Program, Larta Institute, Chicago, November 12,  
2004.

“Using Intellectual Property to Grow”, The Beacon, Chicagoland  
Entrepreneurial Center, Volume 3, Issue 4, December 10, 2004.

“Techniques for Assessing the Value of Your IP Portfolio”, The Wall Street  
Transcript Intellectual Property Conference, New York, January 27, 2005.

“The Tipping Point: Assessing Major Challenges and Growth Opportunities in  
IP Finance”, Moderator, The 3<sup>rd</sup> Annual Advancing IP Structured Finance  
World Research Group Conference”, New York, February 3, 2005.

“Commerce One IP Auction”, Optimizing IP Valuation and Value Creation,  
World Research Group Conference, Miami, March 30-31, 2005.



“Intellectual Capital Equity Management: IP As An Asset Class”, Minnesota Continuing Legal Education Conference, Minneapolis, May 12, 2005.

“Techniques for Evaluating IP Potential”, Life for After Rembrandts, Law Seminars International, Chicago, Illinois, August 4, 2005.

Keynote Address, 2<sup>nd</sup> Annual Intellectual Property Financing and Securitization Summit, New York, September 26, 2005.

“The Power of Intellectual Property in Private Equity Deals”, Association for Corporate Growth and The Licensing Executives Society Connecticut Chapters, Greenwich, Connecticut, October 6, 2005.

“Maximizing the Value of Distressed Debt Backed by Intellectual Property”, Financial Research Associates Distressed Debt Summit 2005, New York, October 7, 2005.

“To Sell or Not to Sell”, Licensing in the Boardroom 2005, a supplement to *Intellectual Asset Management* magazine, 2005.

Patent Auctions & Marketplaces: Leveraging Value from Under-employed Technologies, IP Master Class Presentation, Washington DC, January 10, 2006.

“Risky Business: Overlooking Patents as Financial Assets”, Making Innovation Pay, Edited by Bruce Berman, Published by John Wiley & Sons, Inc., 2006.

“The State of Development & Current Trends in IP Structured Finance” and “The Tipping Point: Assessing Major Challenges, Growth Opportunities and Future Trends in IP Finance”, Moderator, The 4<sup>th</sup> Annual Summit on IP Structured Finance, New York, March 22-23, 2006.

“Generating Revenue From Your Inventions”, IIR 2<sup>nd</sup> Annual Summit on IP Rights for Financial Services, New York, April 25-26, 2006.

“A Behind the Scenes Look at the Patent Bazaar: How Companies and Industry Are Buying and Selling Patents”, Innovators in IP Litigation, IP Law & Business, San Jose, California, May 17, 2006.

“Patent Markets and Their Impact to R&D Strategy”, Industrial Research Institute Annual Meeting, May 21-24, 2006, Colorado.

USC Gould School of Law 2006 Intellectual Property Institute; Featured Speaker, “A Final Word”; Panelist, “Patent Trolls: The Good, the Bad and the Ugly”; May 23, 2006, Los Angeles.

“Patent Auctions: Past, Present & Future”, The 50<sup>th</sup> Annual Conference on Developments in Intellectual Property Law, John Marshall Law School Center for Intellectual Property Law, May 25-26, 2006, Chicago. Speech published as “The Intellectual Property Marketplace: Past, Present and Future”, 5 J. Marshall Rev. of Intell. Prop. L. 605, (2006)



“Patent Auctions: Risky Endeavor or Legitimate Market Opportunity?”, Strafford Legal Teleconference Presentations, June 8, 2006.

The Intellectual Property Investment Summit: Connecting Investors with Strategic Intellectual Property Opportunities, Presented by the Center for Applied Innovation, Summit Co-Chairperson, June 15, 2006, Chicago.

Innovative Structures for Acquiring Intellectual Property: The Benefits, Challenges and Process, LSI Law Seminars International, Program Co-Chair, July 17, 2006, Chicago.

“Licensing and Intellectual Property”, Chicago Regional Independent Inventor’s Conference, Presented by the United States Patent and Trademark Office, Northwestern University School of Law, and the National Inventors Hall of Fame Foundation, July 28-29, 2006, Chicago.

“Reinventing the IP Marketplace – The Exclusive Ocean Tomo Patent Auction Case Study”, IP Licensing Summit: Practical Strategies to Maximize Revenue in Today’s Challenging Intellectual Property Marketplace, August 21-23, 2006, New York.

“Unlocking the Value of Intellectual Property Rights”, Conference of the International Bar Association, September 20, 2006, Chicago.

“This Too Shall Pass”, Americas IP Focus 2006. Managing Intellectual Property Rights, Copyright, Euromoney Institutional Investor, PLC, 2006.

“Developing Markets for Intellectual Assets and Technology”, 21<sup>st</sup> Annual Intellectual Assets and Technology Law Institute, October 5 & 6, 2006, Irving, Texas.

“Patent Damages” and “Patent Reform Efforts: An Update and Review”, The Sedona Conference Patent Litigation VII, October 12-13, 2006, Sedona, Arizona.

“Patent Auctions”, 44<sup>th</sup> Annual Intellectual Property Law Conference, The Center for American and International Law, November 9-10, 2006, Plano, Texas.

“The Future of Developing IP Markets”, 3<sup>rd</sup> Annual Monetization of Intellectual Property & Intangible Assets, Strategic Research Institute, November 16-17, 2006, Boston.

“The IP Transactional Landscape”, Economics of IP Based Transactions, National Knowledge & Intellectual Property Management Taskforce Series Program, November 29-30, 2006, Washington, D.C.

Keynote Presentation, The Business of Intellectual Property Conference, Tech Council of Maryland, Rockville, Maryland, January 10, 2007.

Luncheon Speaker, Corporate Intellectual Property Roundtable, Georgia State University College of Law, Atlanta, January 24, 2007.